

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A communication device, comprising:
incorporating

a first radio system operating at a first range of frequencies; of
operation and

a second radio system operating at a second range of frequencies
of operation[[],];

a controller adapted to control said first radio system and said
second radio system such that only one of said first radio system and said
second radio system may transmit at any one time;

a multiplexer adapted to time multiplex transmissions from said first
radio system and said second radio system;

wherein at least a part of said first range of frequencies and said
second range of frequencies overlap[[],] wherein the device further comprises a
control means adapted to control the first and second radio systems such that
such that only one or the other radio system may transmit at any one time.

2. (currently amended) The communication device of claim 1,
wherein:

the said first radio system is a Bluetooth system and the said
second radio system is an IEEE 802.11 system.

3. (currently amended) The communication device of claim 1,
wherein:

the device is additionally controlled such that when one device said
first radio system is transmitting the other device said second radio system
cannot receive or transmit.

4. (currently amended) The communication device of claim 3,
wherein:

~~the device is additionally controlled such that when one device said first radio system is receiving the other device said second radio system cannot receive or transmit.~~

5. (currently amended) The communication device of claim 2,
wherein said controller further comprises:

~~the control means comprises a switching means a switch adapted to switch on and off the said first radio system and second radio system[[s]].~~

6. (canceled)

7. (currently amended) The communication device of claim 2,
wherein:

~~the control means said controller comprises a multiplexing means multiplexer adapted to time multiplex transmissions from the said Bluetooth system and said IEEE 802.11 radio system[[s]], the said IEEE 802.11 and said Bluetooth transmissions being multiplexed into Bluetooth time-slots.~~

8. (currently amended) The A communication device of claim 7, wherein comprising:

a first radio system operating at a first range of frequencies, said first radio system is a Bluetooth system; and

a second radio system operating at a second range of frequencies, said second radio system is a IEEE802.11 system;

a controller adapted to control said first radio system and said second radio system with only one of said first radio system and said second radio system may transmit at any one time;

wherein at least a part of said first range of frequencies and said second range of frequencies overlap;

wherein said controller comprises a multiplexer adapted to time multiplex transmissions from said first radio system and said second radio system; and

the wherein said Bluetooth transmissions are through a single HV2 SCO link connection, and said the IEEE 802.11 transmissions being in two time-slots in every four.

9. (currently amended) ~~The A communication device of claim 7,~~
~~wherein comprising:~~

a first radio system operating at a first range of frequencies, said
first radio system is a Bluetooth system; and

a second radio system operating at a second range of frequencies,
said second radio system is a IEEE802.11 system;

a controller adapted to control said first radio system and said
second radio system with only one of said first radio system and said second
radio system may transmit at any one time;

wherein at least a part of said first range of frequencies and said
second range of frequencies overlap;

wherein said controller comprises a multiplexer adapted to time
multiplex transmissions from said first radio system and said second radio
system; and

the wherein said Bluetooth transmissions are through a single HV3
SCO link connection, the and said IEEE 802.11 transmissions being in four time-
slots in every six.

10. (currently amended) ~~The A communication device of claim 7,~~
wherein:

a first radio system operating at a first range of frequencies, said
first radio system is a Bluetooth system; and

a second radio system operating at a second range of frequencies,
said second radio system is a IEEE802.11 system;

a controller adapted to control said first radio system and said
second radio system with only one of said first radio system and said second
radio system may transmit at any one time;

wherein at least a part of said first range of frequencies and said
second range of frequencies overlap;

wherein said controller comprises a multiplexer adapted to time
multiplex transmissions from said first radio system and said second radio
system; and

the wherein said Bluetooth transmissions are through two HV3
SCO link connections, and said the IEEE 802.11 transmissions being in two time-
slots in every six.

11. (currently amended) The communication device of claim 2,
wherein:

the said control means prevents transmission of IEEE 802.11
packets during a Bluetooth ACL packet transmission.

12. The communication device of claim 2, wherein:
~~the control means~~ said controller prevents transmission of
Bluetooth ACL packets during an IEEE 802.11 packet transmission.

13. (currently amended) The communication device of claim 12,
wherein:

~~in which the said first radio system and said second radio~~
system[[s]] share a common physical layer.

14. (currently amended) A method of communicating utilizing a first radio system and a second radio system, comprising:

of incorporating a first radio system operating at a first range of frequencies of operation and a second radio system operating at a second range of frequencies into a single device of operation[[,]];

wherein overlapping at least a part of said first range of frequencies and said second range of frequencies overlap[[,]] into a single device[[,]];

time multiplexing transmissions from said first radio system and said second radio system;

controlling wherein the said first radio system and said second radio system[[s]] with are controlled such that only one of said first radio system and said second radio system or the other radio system transmits at any one time.

15. (currently amended) The method of claim 14, wherein:

the said first radio system is a Bluetooth system and the said second radio system is an IEEE 802.11 system.

16. (currently amended) The method of claim 15 14, further comprising:

controlling the said radio systems such that when one radio system is transmitting the other a remaining radio system cannot receive or transmit.

17. (currently amended) The method of claim 16, further comprising:

controlling the said radio systems such that when one radio system is receiving the other a remaining radio system cannot receive or transmit.

18. (currently amended) The method of claim 15, wherein:

the said radio systems are controlled by switching on and off the said first radio system and second radio system[[s]].

19. (canceled)

20. (currently amended) The A method of communicating utilizing a first radio system and a second radio system, comprising claim 19, wherein

incorporating a first radio system operating at a first range of frequencies and a second radio system operating at a second range of frequencies into a single device;

overlapping at least a part of said first range of frequencies and said second range of frequencies;

controlling said first radio system and said second radio system with only one of said first radio system and said second radio system transmits at any one time;

the wherein said Bluetooth transmissions are through a single HV2 SCO link connection, the and said IEEE 802.11 transmissions being in two time-slots in every four.

21. (currently amended) The A method of communicating utilizing a first radio system and a second radio system, comprising claim 19, where

incorporating a first radio system operating at a first range of frequencies and a second radio system operating at a second range of frequencies into a single device;

overlapping at least a part of said first range of frequencies and said second range of frequencies;

controlling said first radio system and said second radio system with only one of said first radio system and said second radio system transmits at any one time;

the wherein said Bluetooth transmissions are through a single HV3 SCO link connection, the and said IEEE 802.11 transmissions being in four time-slots in every six.

22. (currently amended) The A method of communicating utilizing a first radio system and a second radio system, comprising claim 19, where
incorporating a first radio system operating at a first range of
frequencies and a second radio system operating at a second range of
frequencies into a single device;

overlapping at least a part of said first range of frequencies and
said second range of frequencies;

controlling said first radio system and said second radio system
with only one of said first radio system and said second radio system transmits at
any one time;

the said Bluetooth transmissions are through two HV3 SCO link connections, the and said IEEE 802.11 transmissions being in two time-slots in every six.

23. (currently amended) The method of claim 15₁ further comprising:

preventing transmission of IEEE 802.11 packets during a Bluetooth ACL packet transmission.

24. (currently amended) The method of claim 15₁ further comprising:

preventing transmission of Bluetooth ACL packets during an IEEE 802.11 packet transmission.

25. (currently amended) The method of claim 24, in which wherein:
the said first radio system and said second radio systems share a
common physical layer.

26. (new) A communication apparatus, comprising:

means for incorporating a first radio system operating at a first range of frequencies and a second radio system operating at a second range of frequencies into a single device;

means for overlapping at least a part of said first range of frequencies and said second range of frequencies;

means for time multiplexing transmissions from said first radio system and said second radio system;

means for controlling said first radio system and said second radio system with only one of said first radio system and said second radio system transmits at any one time.

27. (new) The apparatus of claim 26, wherein:

said first radio system is a Bluetooth system and said second radio system is an IEEE 802.11 system.

28. (new) The apparatus of claim 26, further comprising:

means for controlling said radio systems such that when one radio system is transmitting a remaining cannot receive or transmit.

29. (new) The method of claim 28, further comprising:

means for controlling said radio systems such that when one radio system is receiving a remaining cannot receive or transmit.

30. (new) The apparatus of claim 26, wherein:

said radio systems are controlled by switching on and off said first radio system and second radio system.